

towards proteins with a higher molecular weight (lane 8). In the exponential growth phase, no SsrA^{DD}-tagged proteins could be detected in the medium (lane 5), while in the stationary phase only a vague smear was observed (lane 11). This is most likely due to cell lysis, by which some intracellular SsrA-
5 tagged proteins end up in the medium. It appears that SsrA-mediated trans-translation occurs quite frequently in normally growing bacilli, and most natural substrates of SsrA seem to be intracellular proteins.

Although the foregoing invention has been described in some detail by way of illustration and example for purposes of clarity and understanding, it
10 will be obvious that certain changes and modifications may be practiced within the scope of the appended claims.